

ABSTRACT OF THE DISCLOSURE

A signal processing circuit outputs a digital word responsive to incident light, and includes an analog integrated circuit having a first input terminal receiving a first analog signal during a first active period of a first switching signal and a second input terminal receiving a time varying reference signal; an inverter circuit inverting and amplifying an output of the analog integrated circuit responsive to an activated enable signal; and an output circuit generating the digital word. During a second active period of the first switching signal, the first input terminal is coupled to a data line for receiving a second analog signal corresponding to image charges of an image input element. The enable signal is deactivated between end points of the first and second active periods of the first switching signal.